Application No.: 10/024,178

Art Unit 2826

Attorney Docket No. 2658-0277P

Reply to April 21, 2005 Office Action

Page 2

Claims

This listing of claims is intended to replace all prior versions, and listings, of claims in this patent application:

1. (currently amended) A liquid crystal display device having a pixel electrode, comprising:

at least two storage capacitors disposed between a gate line and a capacitor electrode formed above the gate line, said gate line being connected, via a contact hole passing through said at least two storage capacitors, to the capacitor electrode, wherein the capacitor electrode is a different electrode than the pixel electrode.

2. (currently amended) The liquid crystal display device as claimed in claim 1,

A liquid crystal display device, comprising:

at least two storage capacitors disposed between a gate line and a capacitor electrode formed above the gate line, said gate line being connected, via a contact hole passing through said at least two storage capacitors, to the capacitor electrode; and

wherein the capacitor electrode is made from a transparent conductive material selected from the group consisting of indium-tin-oxide, indium-zinc-oxide and indium-tin-zinc-oxide.

3. (currently amended) The liquid crystal display device as claimed in claim 1, further comprising:

A liquid crystal display device, comprising:

at least two storage capacitors disposed between a gate line and a capacitor electrode formed above the gate line, said gate line being connected, via a contact hole passing through said at least two storage capacitors, to the capacitor electrode:

- a gate insulating film provided on a substrate;
- a storage electrode provided on the gate insulating film to overlap the gate line; and
- a protective layer provided between the storage electrode and the capacitor electrode.

Application No.: 10/024,178

Art Unit 2826

Attorney Docket No. 2658-0277P

Reply to April 21, 2005 Office Action

Page 3

4. (previously presented) The liquid crystal display device as claimed in claim 3, wherein the

storage capacitor includes:

a first storage capacitor provided between the storage electrode and the gate line with the

intervening gate insulating film; and

a second storage capacitor provided between the storage electrode and the capacitor

electrode with the intervening protective layer.

5. (previously presented) The liquid crystal display device as claimed in claim 4, wherein the

first storage capacitor is connected to the second storage capacitor in parallel.

6. (previously presented) The liquid crystal display device as claimed in claim 4, wherein the

contact hole is at least two holes spaced to each other at a length larger than the width of the

storage electrode.

7. (previously presented) The liquid crystal display device as claimed in claim 6, wherein the

capacitor electrode has a length larger than the storage electrode.

8. (previously presented) The liquid crystal display device as claimed in claim 3, further

comprising:

a gate electrode connected to the gate line;

source and drain electrodes provided on the gate insulating film; and

a pixel electrode provided on the protective layer to be electrically connected to the drain

electrode.

9. (previously presented) The liquid crystal display device as claimed in claim 3, wherein the

pixel electrode electrically contacts the storage electrode through said contact hole passing

through the protective layer.

Application No.: 10/024,178

Art Unit 2826

Attorney Docket No. 2658-0277P

Reply to April 21, 2005 Office Action

Page 4

10. (previously presented) The liquid crystal display device as claimed in claim 8, wherein the

gate insulating film has a thickness of about 4000Å.

11. (previously presented) The liquid crystal display device as claimed in claim 8, wherein the

protective layer has a thickness of about 2000Å.

12. (previously presented) A method of fabricating a liquid crystal display device, comprising

the steps of:

forming a gate line on a substrate;

forming a gate insulating film on the substrate;

forming a storage electrode on the gate insulating film to overlap the gate line;

forming a protective layer on the gate insulating film;

defining at least two contact holes to expose the gate line; and

forming a capacitor electrode electrically contacting the gate line on the protective layer.

13. (previously presented) The method as claimed in claim 12, wherein the capacitor electrode is

made from a transparent conductive material selected from the group consisting of indium-tin-

oxide, indium-zinc-oxide and indium-tin-zinc-oxide.

14. (previously presented) The method as claimed in claim 12, wherein the said least two contact

holes are spaced to each other at a length larger than the width of the storage electrode.

15. (previously presented) The method as claimed in claim 14, wherein the capacitor electrode

has a length larger than the storage electrode.

16. (previously presented) The method as claimed in claim 12, further comprising the steps of:

forming a gate electrode connected to the gate line on the substrate;

Application No.: 10/024,178

Art Unit 2826

Attorney Docket No. 2658-0277P Reply to April 21, 2005 Office Action

Page 5

forming a semiconductor layer on the gate insulating film;

forming source and drain electrodes on the semiconductor layer; and

forming a pixel electrode on the protective layer.

17. (previously presented) The method as claimed in claim 16, wherein the pixel electrode

electrically contacts the storage electrode through said contact hole passing through the

protective layer.

18. (previously presented) The method as claimed in claim 16, wherein the gate insulating film

has a thickness of about 4000Å.

19. (previously presented) The method as claimed in claim 16, wherein the protective layer has a

thickness of about 2000Å.

20. (New) A liquid crystal display device, comprising:

at least two storage capacitors disposed between a gate line and a capacitor electrode formed

above the gate line, said gate line being directly connected, via a contact hole passing through

said at least two storage capacitors, to a capacitor electrode of only one of the two storage

capacitors.

21. (New) A liquid crystal display device having an uppermost electrode, comprising:

at least two storage capacitors disposed between a gate line and a capacitor electrode formed

above the gate line, said gate line being directly connected, via a contact hole passing through

said at least two storage capacitors, to the capacitor electrode which is the uppermost electrode.